REMARKS

Claims 1-10 are pending. The Examiner has rejected claims 1-10 as being anticipated by the Applicant's admitted prior art. The specification has been amended. No new matter has been added. The subject matter added to page 1 of the specification was previously included in the application at page 2, lines 27-31 and page 3, lines 23-26 of the application.

Claim 1 recites a transducer comprising "a base mountable on a substrate, and an input/output (I/O) lead configured to contact an I/O lead of an integrated circuit mounted on the substrate." The Examiner states the Applicant's admitted prior art discloses a transducer comprising a base mountable on a substrate. The Examiner further states it is deemed inherent that the transducer has to have leads to contact the substrate. However, claim 1 does not call for a transducer having leads to contact the substrate. Rather, claim 1 calls for a transducer having a lead configured to contact a lead of an integrated circuit, which integrated circuit is mounted on the substrate.

Applicant acknowledges that it was known to electrically connect a transducer to other integrated circuits by conventional metallic printed circuit board traces. However, such an indirect electrical connection between a transducer and an integrated circuit is vulnerable to the parasitic and high-inductance limitations generally associated with conventional metallic printed circuit board traces (Specification, page 2, lines 29-31). By contrast, the transducer recited in claim 1 is configured to contact an I/O lead of an integrated circuit, rather than indirectly electrically connect to the integrated circuit through the circuit board.

Accordingly, the elements of the claimed invention are not disclosed by the prior art, and claim 1 should be allowable. Claims 2-10 depend from claim 1 and are allowable for at least the same reason.

Claim 2 is allowable for the following additional reason. Claim 2 recites the transducer of claim 1, "wherein the transducer I/O lead is configured to electrically connect to the integrated circuit I/O lead independently of any electrically conductive path of the substrate." Again,

Applicant acknowledges that a transducer plugged into a motherboard or circuit card in a computer and electrically connected to other integrated circuits by conventional metallic printed circuit board traces was a known device configuration (Specification, page 1). However, the electrical connection between the transducer and the integrated circuit disclosed by the prior art would therefore be dependent on (rather than independent of) an electrically conductive path of the substrate. Accordingly, the prior art does not anticipate the transducer recited in claim 2, and claim 2 is allowable.

Attached is a marked-up version of the changes being made by the current amendment. Applicant asks that all claims be allowed. Applicant does not believe any fees are due, however please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

In the specification:

On page 1, the paragraph beginning at line 7 has been amended as follows:

A transducer produces a standardized output in accordance with prescribed protocols, regardless of the medium (e.g., optical fiber or electrical conductor) through which the data is transmitted or received. A transducer typically plugs into a motherboard or circuit card in a computer (e.g., personal computer, workstation, mainframe or server) or a peripheral device (e.g., a mass storage device) and is electrically connected to other integrated circuits by conventional metallic printed circuit board traces. Jumper cables transmit data between different computers, between a computer and one or more peripheral devices, and between printed circuit boards inside the computers or peripheral devices. Data may be transferred using a variety of jumper cable technologies, including multimode optical fiber cables, single mode optical fiber cables, and copper cables (e.g., twinax and coax copper cables). Transducers transition between the transfer media of the jumper cables and the electronic data transfer protocols of the integrated circuits inside the computers and peripheral devices. For example, an opto-electronic transceiver module provides bi-directional transmission of data between the electrical interface of an integrated circuit and an optical data link (e.g., a fiber optic jumper cable). The module receives electrically encoded data signals, converts these signals into optical signals and transmits them over the optical data link. The module also receives optically encoded data signals, converts these signals into electrical signals and transmits them to the electrical interface. As used herein, the term "transducer" refers to a transducer that supports one-way communication and to a transducer (or "transceiver") that supports two-way (or bi-directional) communication.